

Level Notes and Compass Courses of the Seaboard Oil Pipe Line, from the Mouth of Black Fox Run, in Clarion County, Pa., to Patapsco River, near Baltimore, Md. Lines run by O. Barrett, Jr., C.E., Western Division; B. F. Warren, C.E., Middle Division; J. B. Haupt, C.E., Eastern Division.

GEN. H. HAUPT, CHIEF ENGINEER.

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The Seaboard Pipe Line survey line commences in the Oil Region of Western Pennsylvania, in the Valley of the Alleghany River, at a point one and a-half miles below (south of) Monterey Station on the Alleghany Valley Railroad; takes a nearly straight course over the high lands of Indiana and Cambria Counties; descends the face of the Alleghany Mountain; crosses the mountains and valleys of Middle Pennsylvania; the South Mountain range; the red sandstone plain in front of them, and the hills of Middle Maryland to Baltimore; a total distance of about 228 miles, = 1,202,828 feet.

It passes about fourteen miles south of the county town of Indiana; one mile south of Carrolton in Cambria County; crosses the Pennsylvania Railroad at Elizabeth Furnace; the Broad Top Railroad at McConnells-town; passes through Orbisonia, Shade Gap, Roxboro', Shippensburg, Gettysburg; passes one mile south of Littlestown; two and a-half miles south of Westminster; one mile south of Reisterstown; follows the ridge between Patapsco Falls and Guyron's Falls, and terminates on Curtis' Bay two miles south of Canton, on an inlet of Chesapeake Bay at Baltimore.

REMARKS.

In the column marked Δ the distance from starting points B M are given in feet, measured on the ground (not horizontally).

The elevation is given in the second column in feet and hundredths.

NOTE. The decimal point in the 1st, 5th and 7th columns divides the distance into lengths of 100 feet. Thus: 98.35 = 9,835 feet, &c.

The courses given in the second column show the general direction. The line run varies from the general direction in many places, but is seldom more than from one to two hundred yards to right or left of the general course, and in most cases less.

The distances in the fourth column are the distances of a number of shorter courses taken by scale from the plot.

The columns of Maxima and Minima give the undulations, being ordinates at extreme elevations and depressions, or where there are changes in the slope of the ground.

Any further information desired may be obtained from B. F. Warren, 734 N. 20th Street, Philadelphia.

The degrees and minutes of courses begin with 0° at north, running 90° = E; 180° = S; 270° = W, &c.

△	Elev.	Course	Dist.	MAXIMA.		MINIMA.		
				△	Elev.	△	Elev.	
B M	807.45	Elevation of		surface of water in Alleghany River at mouth of				
		Black Fox		Run.				
0.00	824.20	87 $\frac{1}{2}$ °	9155'	39.30	1143.2	50.90	1110.6	Entrance to McElroy's Coal
98.35	1231.8	118 $\frac{1}{2}$ °	20010'	91.90	1343.6			Mine.
				121.00	1500.1	127.80	1445.9	Creek.
				132.45	1496.7	168.00	1210.0	
				170.95	1222.3	178.95	1218.6	
				184.45	1219.1	204.25	1100.0	Catfish Run.
				211.90	1212.8	215.10	1209.7	
				218.15	1212.8	227.50	1185.0	
				235.80	1222.2	242.00	1184.0	
				246.10	1210.0	250.15	1198.6	
				266.15	1252.9	270.50	1235.0	Catfish Run.
				283.80	1206.1	294.70	1271.0	New Athens.
				$\frac{1}{4}$ mile to right.				
315.70	1420.00	128 $\frac{1}{2}$ °	39230'	314.05	1436.8	321.50	1280.0	
				331.60	1413.8	337.10	1290.0	Small Run.
				346.90	1119.0	354.75	1354.0	
				360.50	1110.7	368.10	1273.0	
				378.85	1368.6	389.00	1146.0	
				390.60	1182.5	408.15	1049.7	
				418.35	1092.5	430.60	946.0	Turkey Run.
				441.50	984.7	445.30	923.4	ditto.
				450.55	949.3	456.85	848.0	ditto.
						461.00	839.0	Red Bank Creek.
				Line between Clarion and				
				Armstrong Counties.				
				488.00	1219.6	495.20	1083.0	
				511.05	1222.9	509.80	1158.0	
				518.85	1352.3	526.50	1280.0	
				539.40	1384.1	557.00	1055.0	Creek.
				566.65	1375.6	571.00	1198	Run.
				674.55	1525.4	687.40	1356	Creek.
				694.30	1448.0	701.35	1275	
				707.50	1352.0	730.45	997.0	Br. of Mahoning Cr.
731.75	1038.5	126 $\frac{1}{2}$ °	31030'	736.15	1205.6	740.10	1090.0	Creek.
				762.95	6376.0	784.00	1125.0	Creek.
				811.50	1309.0	824.00	794.5	Mahoning Creek.
				926.75	1459.9	undulating		to
				1011.05	1493.0	1025.40	1276	
				1033.50	1352.0			
1044.60	1290.0	102 $\frac{1}{2}$ °	16430'	1078.90	1595.6	1085.60	1457.1	
				1098.80	1510.0	1130.50	1371.0	
				1159.09	1550.0	1227.65	1329.0	
1214.10	1401.0	116 $\frac{1}{2}$ °	18640'	1247.50	1413.0	1260.90	1303.0	
				1296.35	1381.0	1270.75	1237.0	Glade Run.
				1304.30	1350.0	1323.40	1255.0	
				1346.55	1405.0	1359.90	1287.0	Spring Run.
				1377.00	1469	Line of Arm		strong and Indiana Count's
				1387.75	1495	1411.00	1394	
1407.10	1400.0	129 $\frac{1}{2}$ °	42860'	1422.70	1468.0	1469.00	1345	Run.
				1467.00	1372.0	1473.00	1286	
				1486.80	1406.0	1502.30	1257	Run.
				1597.60	1265.0	1511.00	1247	
				1521.30	1403.0	1530.35	1230.0	
				1537.00	1279.0	1540.25	1187.0	Run.
				1517.00	1351.0	1552.80	1365.0	
				1561.30	1469.0	1571.25	1285.0	
				1577.60	1365.0	1586.50	1194.0	
				1599.20	1337.0	1610.40	1224.0	
				1615.25	1247.0	1625.50	1201.0	
				1638.30	1224.0	1663.70	1208.0	
				1682.55	1274.0	1686.00	1214.0	
				1690.40	1332.0	1692.30	1173.0	
				1725.20	1301.0	1735.75	1270.0	
				1745.20	1358.0	1749.70	1238.0	
				1757.20	1331.0	1771.00	1227.0	
				1781.00	1383.0	1785.00	1295.0	

Δ	Elev.	Course	Dist.	MAXIMA.		MINIMA.		
				Δ	Elev.	Δ	Elev.	
1842.80	1400.0	121.10'	32090'	1789.80	1344.0	1794.40	1303.0	Run.
				1802.35	1500.0	1817.75	1259.0	
				1817.30	1415.0	1853.15	1254.0	
				1881.45	1328.0	1885.00	1289.0	
				1898.10	1360.0	1906.55	1328.6	
				1911.20	1336.0	1917.00	1260.0	
				1924.00	1341.0	1931.00	1246.0	
				1959.50	1295.0	1955.00	1277.0	
				1989.65	1484.0	2002.60	1399.0	
				2018.75	1536.0	2030.80	1467.0	
				2057.30	1680.0	2073.75	1595.0	
				2078.15	1621.0	2108.10	1441.0	
				2114.50	1468.0	2126.50	1392	
				2142.95	1635	2156.10	1425	
				2159.00	1463	2165.35	1384	
2182.90	1480	119.25'	11390'	2206.80	1638	2217.25	1574	Two Lick Creek.
				2228.25	1638	2241.15	1590	Run 4' wide.
				2253.80	1628	2264.75	1555	
				2272.00	1611	2275.30	1553	Run.
				2281.95	1590	2290.30	1572	
				2319.80	1671.5	Divide of Two Lick and Mahoning Cr'ks		
2297.15	1609	169.40'	6540'	2372.60	1380	2372.60	1380	Run.
				2376.15	1440	2407.30	1374	Br. of Two Lick Creek.
				2450.45	1593	2504.80	1527	
				2556.00	1607			
3579.60	1544.7	156.10'	16520'	2521.90	1421	2521.90	1421	Creek.
				2603.30	1557.5	2613.00	1442	
				2626.15	1625	2640.15	1497	
				2652.95	1666	2661.00	1612	
				2701.05	1962	2710.20	1934	
				2714.60	1959	2732.00	1870	
				2745.55	1986			
2751.00	1978	129.45'	32020'	2781.65	1831	2781.65	1831	Run.
				2804.45	1811	2808.50	1786	
				2818.40	1858	2835.55	1807	
				2851.70	1894	2860.00	1868	
				2882.35	1896	2909.00	1898	
				3019.30	2014	3027.00	1984	
				3066.95	2096			
3075.80	2055.0	107.40'	13820'	3081.00	2065	3081.00	2065	Spring.
				3143.55	2144	3165.70	2015	
				3171.70	2099	3187.75	2083	
3220.15	2060.9	102.50'	10330'	3200.25	2118	3214.30	2015	Creek.
				3223.50	2090	3267.30	2036	
3324.10	1855	127.30'	6610'	near ly	lev el.	3369.10	1766	Creek. Same Creek. Laurel Run. Chestnut Creek. Run. Run. Run. Same Run.
				3380.00		1757		
				3398.50		1752		
				3406.00		1751		
				3414.30		1880		
				3456.30		1981		
				3494.00		1917		
3515.00	1747.3	88.35'	8480'	3505.60	1876	3514.75	1747	Run. Run. Run. Same Run. Run. Creek. Creek.
				3522.40	1765	3521.00	1761	
				3532.15	1990	3550.30	1768	
				level.		3565.75	1687	
				3581.05	1875	3594.75	1722	
				3606.65	1877			
3607.90	1859.3	105.30'	12510'	3615.40	1778	3615.40	1778	Creek. Creek. Clearfield Creek.
				3630.85	1868	3640.30	1785	
				3657.15	1868	3669.00	1798	
3711.30	1808.5	72.35'	8430'	3699.00	1690	3699.00	1690	Run. Run. Run. Run.
				3765.10	2030	3773.75	1961	
				3796.85	2110	3801.80	2108	
				3821.50	2185			
3826.60	2180	65.30'	7980'	3828.25	2194	3843.30	1910	Laurel Run.
				3862.00	2138	3871.90	2110	
				3888.00	2183	39435	1986	
3906.90	2020.0	62.45'	7805'	uniform rise	3953.10	2256	Creek.	

△	Elev.	Course	Dist.	MAXIMA.		MINIMA.		
				△	Elev.	△	Elev.	
3986.00	2408.0	64.30°	7315'	4028.20	2537'	4038.40	2461'	Line bet. Cambria & Blair co
				4054.95	2596	4039.90	2461	
4059.60	2564	118.00°	20775'	4064.50	2570	4087.00	2297	Head of Creek. Creek. Creek. Creek. Creek. Creek. Creek. Creek. Creek. Creek 15' wide.
				4092.10	2233	4101.85	1992	
				4124.25	1729	4122.15	1722	
				4142.85	1642	4126.30	1663	
				4150.00	1637	4133.35	1606	
				4154.90	1607	4146.50	1627	
						4161.30	1390	
						4181.20	1304	
						4237.45	1175	
						4249.00	1154	
4287.20	1198	88.00°	4605'	4261.10	1175	4256.00	1149	
				4275.00	1138	4272.30	1126	
				4293.80	1248	4282.50	1118	
				4301.25	1246	4297.75	1222	
4344.00	1044.6		BM.	4310.95	1242	4322.90	1067	Error = 0.4.
				M. Div.		- 1056.8		

MIDDLE DIVISION.

BM. = 1057.2

O. MD	1044.6	110.45°	11450'	31.40	1089'	31.15	1053'	Creek. Creek. Creek. Creek.
				73.63	1102	37.15	1053	
				100.87	1158	94.75	1130	
115.38	1328.6	75.45°	7710'	101.60	1154	107.50	1201	W. Brush Mt. Run. Sinking Valley. Run. Run. E. Brush Mt Canoe Creek. Canoe Mt. Run. Creek. Roaring Run. Juniata River.
				118.82	1415	124.09	1507	
				137.48	1927	140.19	1974	
				156.48	2412	Sum mit of		
199.48	1731.5	71.30°	7190'	205.98	1708	219.00	1327	
						240.90	1114	
273.93	1104.5	132.35°	4920'	288.04	1107	300.40	1046	
				313.02	1159	316.10	1141	
323.42	1192.79	127.15°	28790'			333.60	1272	
						319.40	1347	
						343.59	1395	
				349.34	1667	362.56	1843	
				374.51	2240	Sum mit of		
						415.76	1168	
				456.98	1862	469.84	1835	
				470.02	1907	475.47	1903	
				478.60	1940	Sum mit of		
						485.69	1667	
				496.09	1530	504.76	1249	
				507.13	1229	518.00	1083	
				521.09	1136	537.28	1039	
				550.88	1013	553.00	923	
				504.67	1012	578.14	835	
				582.10	882	599.00	780	
				587.43	927	601.43	746.6	
619.15	821.4	140.15°	34080'	628.77	886	635.60'	740	
				670.60	1340			
				672.70	1364	675.00	1345	
				680.40	1493			
				695.40	1907	Sum mit of		
				715.97	1266	721.38	1259	
						740.49	1650	
				756.61	2296			
				765.95	2328	Sum mit of		
						780.00	2178	

△	Elev.	Course	Dist.	MAXIMA.		MINIMA.		
				△	Elev.	△	Elev.	
				782.24	2189	799.35	1787	
				805.68	1707	825.85	1143	Run.
				856.37	897	844.00	936	Run.
				867.79	920	863.05	813	
				888.07	862	882.21	791	
						892.40	794	
						905.00	772	
				910.20	868	915.60	772	
				921.54	868	925.00	827	
				930.82	872			
961.37	672.6	161.15°	8530'	*		962.75	650	
See		note	bel'w	975.12	696	1007.46	699	Creek.
						1013.08	630	Creek.
				1035.43	819	1031.60	773	
				1047.14	1137.6	1037.53	844	
1052.28	1072	138.15°	37040'			Summit of		Pine Ridge.
				1074.80	860	1067.40	752	
				1121.55	993	1090.38	769	Creek.
				1132.88	1016	1126.00	910	
				1144.60	1022	1141.21	912	Run.
				1156.30	1193	1147.70	1013	
				1176.10	1254	1163.04	1050	
				1190.50	1082	1184.00	1019	
				1205.70	1005	1197.90	886	Creek.
				1219.50	819	1213.20	762	Spring.
				1285.04	1684	1256.90	625.3	Raystown Br.
						Summit of		Terrace Mt.
						1301.40	1430	
				1304.30	1473	1313.14	1412	
				1320.50	1419	1355.60	1259	Little Trough Creek.
				1368.10	1364	1371.22	1325	
				1391.75	1652	Summit of		Sideling Hill.
				1403.50	1221	1413.37	1100	Creek.
						1425.10	969	Creek.
1429.05	956	140.20°	26375'	1450.92	1242	1461.80	950	Creek.
				1469.20	1054	1474.70	924	
						1481.80	803	Creek in Hares' Valley.
				1495.20	871	1523.36	1269	
				1511.00	1840	Summit of		Jacks Mt.
						1552.59	1653	
				1556.00	1682	1564.70	1631	
				1575.00	1776	1582.80	1582	
				1585.50	1564	1591.80	1513	Creek.
				1611.10	1726	1636.10	1424	
				1637.80	1402	1652.10	1109	
						1657.60	1076	
1695.73	987	182.30°	11130'	1668.70	1083	1679.00	1036	Creek.
				1697.80	964	1784.10	711	Creek.
				1787.51	759			
1815.70	736	155.45°	27700'			1834.70	660	
				1883.10	790	1893.00	670	Gt. Aughwick Cr.
				1930.00	1022	1931.50	960	
				1937.60	1010	1961.20	610	
				1966.00	691	1970.10	708	
				1990.10	692	2006.70	725	Orbisonia.
				2023.70	751	2073.80	726	Rock Hill Gap.
† 2130.44	830	149.00°	26690'					
See		note	bel'w			2148.30	835	Creek.

*NOTE.—From △ 975.12 there appears to be a constant error amounting to 161' at B.M.; this error should be distributed uniformly—as from tests the variation is constant and uniform.

† From 2150.44 the line follows the general direction of the road through Shade Gap and diverges considerably from a straight line, thus:



△	Elev.	Course	Dist.	MAXIMA.		MINIMA.		
				△	Elev.	△	Elev.	
				2211.50	870	2244.15	890	Creek 20' wide.
				2245.40	903	2255.20	910	Creek.
				2304.70	1094	2322.00	1065	Creek.
				2325.40	1121	2346.70	1097	
				2364.10	1105	2392.60	1111	
						2404.15	1105	Creek.
				2442.90	1150	2454.20	1132	
				2469.10	1167	2475.80	1162	Creek.

If the line be run directly across the mountains on the course 149° it will give the following Maxima and Minima (approximately).

Line across the Mts. from								
				2200.00	1770	2150.69	842	
				2200.00	1340	2216.20	1325	
				2258.00	1160	2247.00	1020	
				2300.00	1530	2306.50	1070	
						2312.00	1380	
						2322.00	1300	
				2328.00	1340	2337.50	1328	
						2342.00	1260	
				2360.00	1500	2377.60	1180	
				2385.00	1220	2475.77	1162	Creek.

2475.77	1162	136°15'	13230'			2489.40	1249'		
				2519.10	2060'	2503.00	1518		
						2531.20	1601		
2618.81	1002	115°15'	7750'	2645.00	976	2612.20	1200		Creek.
2697.30	1040	79°00'	2550'	2681.00	1002	2694.00	1030		
2723.20	947	92.30	8930	2737.70	1023	2751.70	1180		
				2758.20	1224	2764.80			
				2797.00	2020	Kitta tinny			Creek.
2826.87	1710	119°00'	17080'	2864.00	1397	2868.60	1250		Mts.
				2876.30	1360	2894.30	1377		
						2916.80	1258		
				2920.80	1272	2942.10	949		Conodogwined Creek.
				2944.00	1030	2952.00	942		ditto.
3028.47	895	120°55'	22720'	3090.80	844	3108.90	844		
				3111.73	865	3139.00	768		
				3146.50	849	3151.00	810		Creek.
				3164.80	855	3175.40	750		Creek.
				3193.00	821	3229.30	700		Conodogwined Creek.
				3260.80	844				
3266.41	840	125°00'	21320'	3305.30	780	3348.50	873		[berland Counties,
				3400.00	885	3435.70	849		Line of Franklin and Cum-
				3458.80	835	3464.60			Shippensburg.
				3499.30	821				
3499.28	821			BM. E. Div. =	821.	Error 161'.			

EASTERN DIVISION.

O BM 659.333	133°35'	13720'				1140	651'		
				24.00	699	33.50	671		
				45.70	744	54.00	707		
				63.50	814	79.00	725		
				117.30	773				
				140.00	818				
147.00	856	133°50'	34830'	188.00	988	207.00	1450		
				211.50	1305	240.00	1130		Creek.
				261.50	1568	278.00	1340		
				348.50	1914	364.50	1861		
				379.50	1953	391.50	1718		Creek.

△	Elev.	Course	Dist.	MAXIMA.		MINIMA.		
				△	Elev.	△	Elev.	
				396.00	1800	401.00	1718	Line between Cumb. and Adams Creek.
				423.00	1914	427.50	1425	
				477.00	1047			Creek.
				492.00	1657			
496.50	1635	109.30	7035	531.00	1232	523.00	1236	Creek.
567.00	1112	109.30	6880	574.30	1102	555.50	1113	
636.00	863	138.10	26670			622.00	825	Conewago Creek, Creek.
				721.00	812	680.00	732	
				773.80	706	767.00	705	Creek.
				816.50	786	829.00	673	
				838.15	728	877.65	671	Creek.
				886.50	643	889.20	666	
				895.25	616			Creek.
				928.50	654	938.00	613	
917.37	630	141.20	21700	955.00	666	972.20	668	Creek.
				987.50	624	1015.00	575	
				1040.70	636	1055.00	525	Creek.
						1069.75	495	
				1077.50	537	1082.35	517	Creek.
				1086.50	533	1091.50	496	
				10.85.00	514	1103.00	495	Creek.
				1108.00	507	1114.60	489	
				1120.00	496	1142.00	461	Creek.
						1142.00	461	
1145.00	460	175.30	10950	Running along Rock Creek.				Creek.
1256.00		155.30	13920	1251.00	480	1275.00	448	
				1234.00	472	1313.50	550	Creek.
				1303.00	472	1338.00	442	
				1339.50	568	1351.00	442	Creek.
				1363.00	509	1383.60	411	
				1427.50	531	1432.50	508	Creek.
				1438.50	528	1443.00	506	
				1447.00	522	1450.00	506	Creek.
				1458.00	538	1462.25	528	
				1468.00	535	1472.00	533	Creek.
				1479.00	497	1482.50	511	
						1492.40	482	Creek.
				1499.00	524	1533.00	525	
				1558.00	587	1582.00	510	Creek.
				1606.30	584			
1621.27		136.30	28680			1626.80	515	Creek.
				1658.20	521	1679.70	561	
				1691.10	611	1696.70	585	Creek.
				1714.97	641	1718.50	632	
				1735.70	604	1746.20	551	Creek.
				1758.10	615	1776.20	517	
				1778.11	596	1788.40	571	Creek.
				1829.70	706	1851.93	605	
				1856.00	Line	bet. Penn	a. and Maryland.	Creek.
						1884.70	638	
				1907.70	731			Creek.
						1937.70	693	
1926.16	755	137.00	29140	1943.50	735			Creek.
				1952.70	666	1951.25	618	
						1972.70	582	Creek.
				2013.70	790	2022.70	700	
				2025.70	707	2027.30	686	Creek.
				2029.70	721	2041.20	700	
				2048.70	792	2059.70	667	Creek.
				2068.00	789	2082.00	603	
				2085.70	716	2110.70	576	Creek.
				2120.70	762	2125.70	720	
				2129.25	746	hol	low	Creek.
				2147.70	718	2150.20	683	
				2161.20	698	2166.70	657	Creek.
				2171.20	673	2182.15	587	
						2186.70	593	Creek.
				2189.70	684	2196.70	607	

△	Elev.	Course	Dist.	MAXIMA.		MINIMA.		
				△	Elev.	△	Elev.	
2227.70	706.3	137.30'	9775'	2197.25	620'	2223.50	680'	Creek.
				2212.70	725	2252.70	676	
				2253.70	745			
				2234.70	755	2239.70	726	
				2274.00	742	2241.70	674	
2328.70	188.30'	7150'	2287.70	751	2241.70	730	Creek.	
			2288.70	751	2311.70	678		
			2297.70	767	2310.70	739		
			2330.20	797	2382.70	795		
			2369.70	880				
2405.08	152.05'	27870'	2386.70	826	2118.70	732	Creek.	
			2443.70	861	2152.20	776		
			2471.45	914				
			2481.00	971	2192.20	870		
			2501.70	891				
			2508.45	906				
			2523.70	874	2532.70	819		
			2540.70	843	2543.70	834		
			2563.70	864	2576.20	803		
			2585.35	813	2598.70	814		
					2632.70	788		
					2444.30	780		
					2652.70	757		
					2662.70	717		
			2697.70	152.00'	26340'	2476.70		735
2606.70	743	2702.20				707		
2722.70	733	2727.70				650		
2732.70	685							
2742.20	649	2745.20				585		
2747.70	620							
2752.70	644	2762.70				489		
2785.70	652	2798.20				530		
2799.70	511	2802.45				461		
2810.00	520							
2812.70	534	2820.70				467		
2831.70	612	2838.70				464		
		2841.70				461		
		2846.70				529		
		2855.20				604		
		2859.70				557		
		2867.70				544		
		2879.70				572		
		2885.70				552		
		2886.70				511		
		2888.70	540					
		2908.00	429					
		2916.70	453					
		2921.70	467					
		2923.00	526					
		2928.20	Line of Carroll					
		2929.00	532					
		2938.10	499					
		2943.70	581					
		2944.70	508					
		2949.70	519					
		2951.45	473					
		2957.70	509					
		2959.70	469					
2981.60	522	190.30'	9460'	2976.30	584	3053.00	475	Creek.
				3047.10	574	3058.70	474	
3077.06	189.45'	9010'	3068.70	541	3070.70	532	Creek. Run.	
			3077.00	606	3078.00	593		
			3085.20	642	3086.70	626		
			3090.70	633				
			3099.30	634	3113.70	556		
			3124.70	605	3143.45	568		
			3151.00	671				
			3163.30	688	3169.70	626		
			3173.70	639	3187.70	536		
					3191.70	511		
3188.50	533	167.00'	9170'	3201.10	613			Creek.
				3210.70	647	3215.20	625	
				3223.40	683	3237.00	600	
				3241.20	620	3248.20	537	
				3265.70	677	3281.70	677	

△	Elev.	Course	Dist.	MAXIMA.		MINIMA.		
				△	Elev.	△	Elev.	
3297.60		149.15	12510'	3284.70	702'	3288.20	659'	Creek.
				3291.20	693			
				3293.70	651	3298.70	616	
				3320.70	698	3309.20	600	
				3352.70	682	3345.70	639	
				3352.70	682	3364.00	645	
				3365.50	650	3368.20	641	
				3371.70	659	3381.70	581	
						3393.30	547	
						3400.70	591	
3428.70	623	142.45	18890'	3403.70	590	3407.00	558	Creek.
				3413.20	616	3417.00	579	
				3454.70	622	3436.20	533	
				3472.70	606	3464.70	573	
						3480.20	487	
				3498.70	577	3505.70	564	
				3508.70	578	3512.70	513	
						3532.00	481	
				3550.70	591	3561.00	589	
				3574.70	593	3580.70	563	
3620.70	490.5	167.45	10500'	3585.10	574	3610.70	500	Creek.
				3616.45	514			
						3630.70	483	
				3636.20	505	3641.70	503	
				3649.20	518	3664.70	508	
				3675.70	579	3689.70	501	
				3699.70	518	3720.70	511	
				3739.80	524			
						3765.20	494	
						3805.70	478	
3743.45		172.30	12820'	3781.70	525	3847.20	400	Creek.
				3815.70	481	3880.70	439	
				3883.70	449	3901.20	384	
				3911.20	423	3917.45	393	
				3930.70	510	3998.45	464	
				4002.20	480	4039.20	326	
						4043.70	337	
						4049.70	398	
						4065.70	317	
						4076.20	288	
4050.20	395	127.30	13070'	4039.70	326	4099.70	214	Creek.
				4079.70	315	4115.10	165	
				4109.10	224	4136.70	95	
				4121.70	173	4039.70	98	
				4050.70	171			
				4085.70	159			
				4030.70	234	4213.70	79	
				4221.35	123	4227.40	96	
				4236.20	140	4211.70	83	
				4259.20	158			
4185.00		125.40	15630'	4264.70	117	4265.70	128	Pond extends to 4275.70.
				4281.70	144	4290.70	89	
				4291.70	119	4302.70	61	
				4310.55	125	4346.70	0	
				Patapsco R., about 6 miles below Baltimore.				